

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listing, of claims in the application.

Listing of the Claims:

1. (Currently amended) A medical ~~light-source~~ sensor comprising one or more flexible light emitting diodes formed upon respective regions of flexible substrate and one or more flexible photo-detectors formed upon respective regions of flexible substrate.
2. (Currently amended) A medical ~~light-source~~ sensor according to ~~any preceding~~ claim 1 in which the flexible light emitting diodes are formed upon a single flexible substrate.
3. (Currently amended) A medical ~~light-source~~ sensor according to ~~any preceding~~ claim 1 arranged to be sufficiently flexible to permit the light source, in operation, to conform to a portion of the body of a patient to which light from the light source is to be applied.
4. (Currently amended) A medical ~~light-source~~ sensor according to ~~any preceding~~ claim 1 in which the flexible light emitting source comprises an organic light emitting diode.
5. (Currently amended) A medical ~~light-source~~ sensor according to ~~any preceding~~ claim 1 in which the flexible light emitting diode emits light at a wavelength suitable for diagnosis or therapy of a medical condition of the human or animal body.
6. (Currently amended) A medical ~~light-source~~ sensor according to ~~any preceding~~ claim 1 in which the flexible light emitting diode emits light in the red to infra-red region of the spectrum.
7. (Currently amended) A medical ~~light-source~~ sensor according to ~~any preceding~~ claim 1 in which the flexible light emitting diode emits light in the near infra-red region of the spectrum.

8. (Currently amended) A medical ~~light source~~ sensor according to ~~any preceding~~ claim 1 in which the flexible light emitting diode emits light in a non-visible region of the spectrum.
9. (Currently amended) A medical ~~light source~~ sensor according to ~~any preceding~~ claim 1 comprising a plurality of flexible light emitting diodes arranged to emit light at mutually distinct wavelengths.
10. (Currently amended) A medical ~~light source~~ sensor according to ~~any preceding~~ claim 1 comprising at least two light emitting diodes arranged to emit at mutually distinct wavelengths, the light emitting diodes being arranged such that light at those distinct wavelengths is emitted substantially evenly across the sum of the areas defined by the light emitting diodes emitting at those wavelengths.
11. (Cancelled)
12. (Currently amended) A medical ~~light source~~ sensor according to ~~any preceding~~ claim 1 comprising a strap comprising attachment means for attachment of the medical light source around or to a patient's body.
13. (Currently amended) A medical ~~light source~~ sensor according to claim 12 in which the flexible substrate forms the strap.
14. (Currently amended) A medical ~~light source~~ sensor according to ~~any one of claims 12-14~~ claim 12 in which the attachment means is one of hook-and-loop means, barb-and-slot means, and self-adhesive means.
15. (Currently amended) A medical ~~light source~~ sensor according to ~~any preceding~~ claim 1 in which the light emitting diode comprises a triplet emitter.

16. (Currently amended) A medical ~~light source~~ sensor according to ~~any preceding claim 1~~ in which the light emitting diode comprises one or more components arranged to wavelength-shift light emitted within the light source from a first wavelength to a second wavelength.
17. (Currently amended) A medical ~~light source~~ sensor according to claim 16 comprising a fluorescent emitter and in which wavelength-shifting is at least partially achieved by means of a fluorescent emitter.
18. (Currently amended) A medical ~~light source~~ sensor according to ~~any one of claims 16-17~~ claim 16 comprising a wavelength-shifting grating and in which wavelength-shifting is at least partially achieved by means of the wavelength-shifting grating.
19. (Currently amended) A medical ~~light source~~ sensor according to ~~any one of claims 16-18~~ claim 16 comprising a micro-cavity and in which wavelength-shifting is at least partially achieved by means of the micro-cavity.
20. (Currently amended) A medical ~~light source~~ sensor according to claim 19 in which the second wavelength is determined by tuning of the micro-cavity.
21. (Currently amended) A medical ~~light source~~ sensor according to claim 20 in which the micro cavity is tuned to emit light at a third wavelength substantially perpendicular to the plane of the light emitting diode.
22. (Cancelled)
23. (Currently amended) A medical sensor according to claim ~~22~~ 1 ~~comprising a medical light source according to any one of claims 1-21 and~~ in which at least one of the one or more flexible photodetectors is arranged so as, in operation, to detect light emitted by at least one of the flexible light emitting diodes.

24. (Currently amended) A medical sensor according to claim 23 ~~in~~ comprising two or more flexible light emitting diodes arranged to emit light on a time-interleaved basis.
25. (Currently amended) A medical sensor according to ~~any one of claims 22-24~~ claim 1 comprising a plurality of the medical light sources arranged, in operation, to emit light at wavelengths suitable for diagnosis of levels of at least one of oxygen, carbon monoxide, and bilirubin in a human or animal body.
26. (Currently amended) A medical sensor according to ~~any one of claims 22-25~~ claim 1 in which the light detector is an organic photovoltaic detector.
27. (Currently amended) A method of operating a medical ~~light source~~ sensor according to claim 15 in a pulsed mode having a predetermined pulse period, such that the triplet emitter is activated for a period calculated to ensure that emissions fall to acceptable levels before a subsequent light pulse is emitted.
28. (Original) A method according to claim 27 in which the predetermined pulse period is less than or equal to 25 ms.
29. (Currently amended) A method of operating a medical sensor according to ~~any one of claims 22-26~~ claim 1 in a pulsed mode, timing of emitted light pulses being determined responsive to an indication of the pulse timing of a patient to which the sensor is applied.
30. (Cancelled)
31. (Cancelled)
32. (Original) An organic light emitting diode arrangement comprising an organic light emitting diode arranged to emit light in the blue region of the spectrum and a wavelength-

converting layer arranged to convert blue emissions from the organic light emitting diode to emissions in the infra-red region of the spectrum.

33. (Original) An organic light emitting diode arrangement according to claim 32 in which the wavelength-converting layer comprises a phosphor based compound.

34. (Currently amended) An organic light emitting diode arrangement according to ~~any one of claims 32-33~~ claim 32 in which the wavelength-converting layer comprises an infra-red edge filter.

35. (Cancelled)

36. (Cancelled)